

REMARKS/ARGUMENTS

1. Rejection of claims 1-8 under 35 U.S.C 102(b) as being anticipated by Ahn (Us 5,716,865):

5

Claim 1:

Claim 1 is listed hereinafter for reference in which distinct limitations are marked by underline:

10

Claim 1 (original) A non-volatile memory cell, comprising:

a substrate, the substrate comprising a first region and a second region;

a plurality of isolation structures positioned on the substrate, the isolation structures comprising a first isolation structure positioned in the first region and a second isolation structure surrounding the second region;

15

a control gate positioned on the first isolation structure in the first region;

a first insulating layer positioned on the control gate;

a second insulating layer positioned on the portion of the substrate in the second region; and

20

a floating gate positioned on the first insulating layer and the second insulating layer.

Regarding US 5,716,865, Ahn discloses a split gate flash EEPROM cell. The Examiner asserts that the memory cell of the present application has been anticipated by Ahn, but the applicant disagrees and explains as follows.

25

First of all, Ahn never indicates where the first region and the second region of the memory cell are in Ahn's drawings. The Examiner says that Ahn discloses a first

isolation structure 2B in the first region (as recited in page 3, line 1 in the above identified Office action), the right portion of Ahn's cell should explicitly be the first region to meet the limitation requirement of claim 1. In such a case, Ahn's memory cell is distinct from that of claim 1 because the second isolation 2A, which would implicitly be 2A if the first
5 isolation structure is 2B, does not surround the second region, which would be the left portion if the first region is the right portion in Fig.3B.

Second, the control gate of claim 1 is positioned on the first isolation structure in the first region. On the other hand, Ahn's control gate 10A is positioned on the gate oxide
10 layer 4, instead of the isolation structure 2A/2B as shown in Fig.3B.

As a result, claim 1 is distinct from Ahn's teaching, and should be allowed. Reconsideration of claim 1 is therefore requested.

15 Claim 3:

Claim 3 includes the limitation "the floating gate comprises an opening positioned above the first insulating layer, and the opening is used to form a wire therein to connect to the control gate". Ahn fails to teach or suggest this limitation, and therefore claim 3 is
20 patentably distinct and should be allowed. Reconsideration of claim 3 is politely requested.

Claim 4:

25 Claim 4 includes the limitation "the substrate comprises a well of a first conductivity type positioned in the first region and the second region". Ahn fails to teach or suggest this limitation, and therefore claim 4 should be allowed. Reconsideration of claim 4 is politely requested.

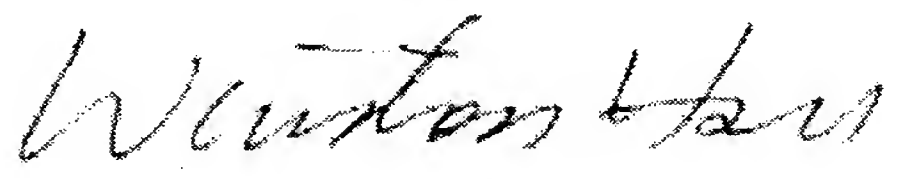
Appl. No. 10/710,935
Amdt. dated January 19, 2007
Reply to Office action of October 20, 2006

Claims 2, 5-8:

5 Claims 2, 5-8 are dependent on claim 1, and should be allowed if claim 1 is found allowable. Reconsideration of claims 2, 5-8 is therefore requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

10 Sincerely yours,



Date: 01/19/2007

Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

15 Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C.
20 is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)